REMARKS

In the November 16, 2005 Office Action, claims 1-4, 24, 25, 29, 33-36, 57, 58, 62, 67-73, 94, 95, 99 and 103-105 stand rejected in view of prior art, while claims 12, 22, 45, 82 and 92 were rejected under §112, second paragraph for failing to indicate and claim particularly and distinctly the subject matter that Applicants regard as the invention. Claims 5, 8-10, 13, 14, 18-21, 23, 37, 38, 41-43, 46, 47, 51-55, 66, 74, 75, 78-80, 83, 84 and 88-92 were indicated as containing allowable subject matter. Claims 12, 22, 45, 82 and 92 were indicated as being allowable if rewritten to overcome the rejections under §112, second paragraph. Claims 2, 14, 25, 29, 33, 35, 47, 62, 66, 72, 84, 99 and 103 were objected to for containing informalities. Claims 6, 7, 11, 15-17, 23, 26-28, 30-32, 39, 40, 44, 48-50, 56, 59-61, 63-65, 76, 77, 81, 85-87, 93, 96-98 and 100-102 are withdrawn from further consideration. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the November 16, 2005 Office Action, Applicants have amended claims 1, 2, 4-16, 18-27, 29-35, 41, 45, 47, 49, 58, 62-68, 70, 72, 74-86, 88-97 and 99-105 as indicated above. Applicants wish to thank the Examiner for the indication of allowable subject matter and the thorough examination of this application. Claims 1-105 are pending, with claims 1, 104 and 105 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

Election of Species

In the numbered paragraph 1 of the Office Action, Applicants' election of Species I without traverse in the response filed on June 14, 2005 was acknowledged. Thus, non-elected claims 6, 7, 11, 15-17, 23, 26-28, 30-32, 39, 40, 44, 48-50, 56, 59-61, 63-65, 76, 77, 81, 85-87, 93, 96-98 and 100-102 were withdrawn from further consideration. However, Applicants respectfully request that non-elected claims 6, 7, 11, 15-17, 23, 26-28, 30-32, 39, 40, 44, 48-50, 56, 59-61, 63-65, 76, 77, 81, 85-87, 93, 96-98 and 100-102 be rejoined in this application upon allowance of a generic or linking claim, or claims.

Claim Objections

In the numbered paragraph 4 of the Office Action, claims 2, 14, 25, 29, 33, 35, 47, 62, 66, 72, 84, 99 and 103 were objected to for containing informalities. In response, Applicants have

amended claims 2, 14, 25, 29, 33, 35, 47, 62, 66, 72, 84, 99 and 103 to correct the errors in these claims. Thus, Applicants believe claims 2, 14, 25, 29, 33, 35, 47, 62, 66, 72, 84, 99 and 103 are now correct. Withdrawal of the objection is respectfully requested.

Claim Rejections - 35 U.S.C. §112

In the numbered paragraph 5 of the Office Action, claims 12, 22, 45, 82 and 92 were rejected under 35 U.S.C. §112, second paragraph. In response, Applicants have amended claims 12, 22, 45, 82 and 92 so that these claims particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Thus, Applicants believe claims 12, 22, 45, 82 and 92 now comply with 35 U.S.C. §112, second paragraph. Withdrawal of the rejections is respectfully requested.

Rejections - 35 U.S.C. § 102

In the numbered paragraphs 6 and 7 of the Office Action, claims 1-3, 34-36, 104 and 105 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,371,883 to Eguchi (hereinafter "Eguchi patent"). In response, Applicants have amended independent claims 1, 104 and 105 to clearly define the present invention over the prior art of record.

In particular, independent claims 1, 104 and 105 now require the following structures:

1. a ***main drive source*** configured and arranged to supply a main drive wheel with a drive torque;
2. a ***subordinate drive source*** configured and arranged to supply a subordinate drive wheel with a drive torque; and
3. a ***clutch*** disposed in a torque transfer path from the ***subordinate drive source*** to the ***subordinate drive wheel.***

Moreover, the independent claims 1, 104 and 105 recite disengaging the clutch ***upon the drive torque of the subordinate drive source substantially reaching a target drive torque*** in which a difference between an output torque of the clutch and an input torque of the clutch is smaller than a prescribed value.

Clearly, this structure is ***not*** disclosed or suggested by the Eguchi patent. It is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose ***each*** and ***every*** element of the claim within the reference. Therefore, Applicants respectfully submit that independent claims 1, 104 and 105, as now amended, are not anticipated by the prior art of record. Withdrawal of this rejection is respectfully requested.

Moreover, Applicants believe that dependent claims 2, 3 and 34-36 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, dependent claims 2, 3 and 34-36 are further allowable because they include additional limitations. Thus, Applicants believe that since the prior art of record does not anticipate the independent claim 1, neither does the prior art anticipate the dependent claims.

Applicants respectfully request withdrawal of the rejection.

Rejections - 35 U.S.C. § 103

In the numbered paragraphs 8-11 of the Office Action, claims 4, 24, 25, 29, 33, 57, 58, 62, 67-73, 94, 95, 99 and 103 stand rejected under 35 U.S.C. §103(a). More specifically, claims 24, 29, 33, 57 and 62 are rejected as being unpatentable over the Eguchi patent. Claims 4, 25 and 58 are rejected as being unpatentable over the Eguchi patent in view of U.S. Patent No. 6,533,701 to Maruyama (hereinafter "Maruyama patent"). Claims 67-73, 94, 95, 99 and 103 are rejected as being unpatentable over the Eguchi patent in view of U.S. Patent No. 6,578,649 to Shimasaki et al. (hereinafter "Shimasaki et al. patent"). In response, Applicants have amended independent claim 1 as indicated above. Applicants believe none of the Eguchi patent, the Maruyama patent and the Shimasaki et al. patent, whether taken alone or in combination, discloses or suggests the limitations now recited in independent claim 1.

As mentioned above, independent claim 1 has been amended to include the following structures:

1. a ***main drive source*** configured and arranged to supply a main drive wheel with a drive torque;
2. a ***subordinate drive source*** configured and arranged to supply a subordinate drive wheel with a drive torque; and
3. a ***clutch*** disposed in a torque transfer path from the ***subordinate drive source*** to the ***subordinate drive wheel.***

Moreover, independent claim 1 recites disengaging the clutch ***upon the drive torque of the subordinate drive source substantially reaching a target drive torque*** in which a difference between an output torque of the clutch and an input torque of the clutch is smaller than a prescribed value.

Clearly, this structure is ***not*** disclosed or suggested by the Eguchi patent, the Maruyama patent, the Shimasaki et al. patent or any other prior art of record whether taken alone or in combination.

First, the Eguchi patent fails to disclose or suggest the main drive source and subordinate drive source now recited in independent claim 1. Moreover, the Eguchi patent also fails to disclose or suggest disengaging the clutch ***upon the drive torque of the subordinate drive source substantially reaching a target drive torque*** as recited in independent claim 1. With the present invention as recited in claim 1, it is possible to prevent a shock from being generated during clutch release because the clutch is released when a difference between an output torque of the clutch and an input torque of the clutch is smaller than a prescribed value. In other words, in the present invention, the shock is prevented from being generated by disengaging the clutch at timing when little torque is transmitted from the subordinate drive source to the subordinate drive wheel via the clutch.

On the other hand, the Eguchi patent is directed to a transmission control for efficiently achieving engine brake during the vehicle deceleration. In order to control the engine brake during the vehicle deceleration to lessen gradually, the transmission control system disclosed in the Eguchi patent is configured and arranged to release the main clutch gradually while the vehicle is being decelerated. The vehicle is decelerated by terminating the fuel supply to the engine so that the engine is stopped to bring the vehicle into a halt. In other words, in the Eguchi patent, the engine is ***not outputting drive torque*** when the clutch is disengaged since the fuel supply to the engine has been terminated, and the engine is passively rotated by rotation of the drive wheels via the clutch thereby achieving the engine brake. In such case, the engine is rotated by the torque transmitted ***from the drive wheels*** via the clutch. Therefore, the Eguchi patent ***fails*** to disclose or suggest the limitations recited in independent claim 1 which are directed to disengagement of the clutch in consideration of the drive torque ***outputted by the subordinate drive source*** and transmitted to the subordinate drive wheel via the clutch.

Moreover, if the clutch is disengaged when the engine is passively rotated by the rotation of the drive wheels as in the Eguchi patent, the torque that has been transmitted from the drive wheels to the engine via the clutch suddenly ceases. In such case, a shock occurs upon disengagement of the clutch. Thus, the effect of the present invention for preventing

the shock from being generated cannot be obtained by the transmission control system disclosed in the Eguchi patent.

Moreover, the Maruyama patent and the Shimasaki et al. patent both fail to provide for the deficiencies of the Eguchi patent. More specifically, neither the Maruyama patent nor the Shimasaki et al. patent discloses or suggests disengaging the clutch ***upon the drive torque of the subordinate drive source substantially reaching a target drive torque*** in which a difference between an output torque of the clutch and an input torque of the clutch is smaller than a prescribed value as recited in independent claim 1.

It is well settled in U.S. patent law that the mere fact that the prior art can be modified does ***not*** make the modification obvious, unless the prior art ***suggests*** the desirability of the modification. Accordingly, the prior art of record lacks any suggestion or expectation of success for combining the patents to create the Applicants' unique arrangement of the vehicle driving force control apparatus.

Moreover, Applicants believe that dependent claims 4, 24, 25, 29, 33, 57, 58, 62, 67-73, 94, 95, 99 and 103 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, dependent claims 4, 24, 25, 29, 33, 57, 58, 62, 67-73, 94, 95, 99 and 103 are further allowable because they include additional limitations. Thus, Applicants believe that since the prior art of record does not disclose or suggest the invention as set forth in independent claim 1, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims.

Therefore, Applicants respectfully request that the rejections be withdrawn in view of the above comments and amendments.

Allowable Subject Matter

In the numbered paragraphs 12 and 13 of the Office Action, claims 5, 8-10, 13, 14, 18-21, 23, 37, 38, 41-43, 46, 47, 51-55, 66, 74, 75, 78-80, 83, 84 and 88-92 were indicated as containing allowable subject matter and claims 12, 22, 45, 82 and 92 were indicated as being allowable if rewritten to overcome the rejections under §112, second paragraph. Applicants wish to thank the Examiner for this indication of allowable subject matter and the thorough examination of this application.

Applicants believe that dependent claims 5, 8-10, 12, 13, 14, 18-22, 23, 37, 38, 41-43, 45-47, 51-55, 66, 74, 75, 78-80, 82, 83, 84 and 88-92 are allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, dependent claims 5, 8-10, 12, 13, 14, 18-22, 23, 37, 38, 41-43, 45-47, 51-55, 66, 74, 75, 78-80, 82, 83, 84 and 88-92 are further allowable because they include additional limitations that are indicated as containing allowable subject matter. Thus, Applicants believe that since the prior art of record does not disclose or suggest the invention as set forth in independent claim 1, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims.

Prior Art Citation

In the Office Action, additional prior art references were made of record. Applicants believe that these references do not render the claimed invention obvious.

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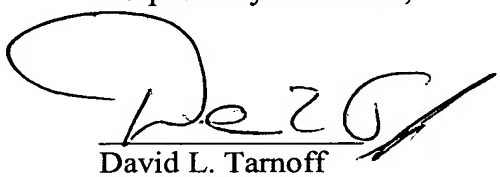
In view of the foregoing amendment and comments, Applicants respectfully assert that claims 1-105 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

Respectfully submitted,



David L. Tarnoff
Reg. No. 32,383

SHINJYU GLOBAL IP COUNSELORS, LLP
1233 Twentieth Street, NW, Suite 700
Washington, DC 20036
(202)-293-0444
Dated: 5-10-06

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